

## **REMARKS**

Applicant respectfully requests reconsideration. Claims 1-92 previously were presented. All but claims 1, 2 and 8 are withdrawn from consideration by virtue of an election. Those claims have been rejected. Reconsideration is requested. In addition, new claims 93-112 are added and are believed free of the grounds of rejection previously applied.

### **Specification**

The disclosure has been objected to as containing an embedded hyperlink on page 4, line 17. Reconsideration is requested. The indicated URL is contained in quotation marks and is not intended as an active link. It is not contained in angled brackets < > that would indicate an active link. Thus, the objection should be withdrawn.

### **Claim Rejections – 35 USC § 101**

The Office Action maintains (§2, pages 2-5) that there is a two-pronged test for determining whether the claimed invention is directed to statutory subject matter under §101, and that this test includes determining: (1) whether the invention is within the technological arts; and (2) whether the invention produces a useful, concrete, and tangible result. Despite the Examiner's interesting and well-presented analysis, this two pronged test is not the correct legal standard, under controlling case law, for determining statutory subject matter under §101. It is reminiscent of the "mathematical algorithm" tests and business methods "exception" rejected by the US Court of Appeals for the Federal Circuit in the *State Street* case, which was founded on fundamental principles of statutory construction and on Supreme Court precedent. While the Office Action cites to a BPAI decision for its authority, a BPAI decision does not override the law enunciated by the Federal Circuit.

According to the Office Action, the Federal Circuit has not addressed the question whether the Constitutional reference to “useful” arts limits the granting of patents to inventions within the “technological” arts, so the Office is free to so interpret the law. This is flatly incorrect and, indeed, is disingenuous and constitutes capricious agency action, acting outside the bounds of its authority.

A clear reading of the *State Street* decision and its companion *AT&T* decision reveals the Federal Circuit has already ruled out the office position. Moreover, the undersigned can state as a factual assertion, having been counsel to appellee *Signature Financial Group* and having been present at the hearing, that the very first issue raised by Judge Rich was, indeed, whether there was an issue of Constitutional dimension presented. Our answer was in the negative; the claimed invention was an apparatus – a computer system. As such, it fell within the statute and the statute had been held to go to the limits of constitutional “useful arts.” The argument was, indeed, presented that both mathematical algorithms and business methods are not within the useful arts, such argument being couched partly as the so-called “business method exception.” According to that so-called exception, even if a claimed invention fell within one of the categories of invention under Section 101, it was nevertheless unpatentable because it was not the kind of thing the patent system was supposed to protect – i.e., it was not a useful art. The court soundly rejected that argument:

As an alternative ground for invalidating the '056 patent under § 101, the [trial] court relied on the judicially-created, so-called “business method” exception to statutory subject matter. We take this opportunity to lay this ill-conceived exception to rest. Since its inception, the “business method” exception has merely represented the application of some general, but no longer applicable legal principle, *perhaps arising out of the “requirement for invention”--which was eliminated by § 103.* Since the 1952 Patent Act, business methods have been, and should have been, subject to the same legal requirements for patentability as applied to any other process or method.

(Emphasis added.)

The claims had also been attacked as an attempt to patent a mathematical algorithm, another prohibition appearing in some court decisions and in Office practice. Here, the court stated in part:

Today, we hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, *because it produces "a useful, concrete and tangible result"*--a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.

\* \* \*

Of particular relevance to this case, the Court has held that mathematical algorithms are not patentable subject matter to the extent that they are merely abstract ideas. See *Diehr*, 450 U.S. 175, 67 L. Ed. 2d 155, 101 S. Ct. 1048, passim; *Parker v. Flook*, 437 U.S. 584, 57 L. Ed. 2d 451, 98 S. Ct. 2522 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 34 L. Ed. 2d 273, 93 S. Ct. 253 (1972). In *Diehr*, the Court explained that certain types of mathematical subject matter, standing alone, represent nothing more than abstract ideas until reduced to some type of practical application, i.e., "a useful, concrete and tangible result." *Alappat*, 33 F.3d at 1544, 31 U.S.P.Q.2D (BNA) at 1557. n4

\* \* \*

Since § 101 expressly includes processes as a category of inventions which may be patented and §100(b) further defines the word "process" as meaning "process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material," it follows that it is no ground for holding a claim is directed to nonstatutory subject matter to say it includes or is directed to an algorithm.

The Federal Circuit boiled the issue down to one of statutory construction:

The repetitive use of the expansive term "any" in §101 shows Congress's intent not to place any restrictions on the subject matter for which a patent may be obtained beyond those specifically recited in § 101. Indeed, the Supreme Court has acknowledged that Congress intended § 101 to extend to

"anything under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303, 309, 65 L. Ed. 2d 144, 100 S. Ct. 2204 (1980); see also *Diamond v. Diehr*, 450 U.S. 175, 182, 67 L. Ed. 2d 155, 101 S. Ct. 1048 (1981).<sup>n3</sup> Thus, it is improper to read limitations into § 101 on the subject matter that may be patented where the legislative history indicates that Congress clearly did not intend such limitations. See *Chakrabarty*, 447 U.S. at 308 ("We have also cautioned that courts 'should not read into the patent laws limitations and conditions which the legislature has not expressed.'" (citations omitted)).

Footnote 3 of the opinion noted that "The Committee Reports accompanying the 1952 Act inform us that Congress intended statutory subject matter to 'include anything under the sun that is made by man.'" S. Rep. No. 82-1979 at 5 (1952); H.R. Rep. No. 82-1923 at 6 (1952)."

Note that the court expressly ruled that any machine, method, article or composition of matter is statutory under §101 (so long as it produces a useful, concrete, tangible result). There were no limiting statements; no "except for non-technological subject matter" carve-out.

Thus, the court found that the claimed invention was such an invention made by man, and not a mere abstraction:

Today, we hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces "a useful, concrete and tangible result"--a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.

Since § 101 expressly includes processes as a category of inventions which may be patented and § 100(b) further defines the word "process" as meaning "process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material," it follows that it is no ground for holding a claim is directed to nonstatutory subject matter to

say it includes or is directed to an algorithm [i.e., something non-technological].

The correct legal standard for determining whether the claim recites statutory subject matter thus only includes one prong: i.e., determining whether the invention produces a useful, concrete and tangible result and is a process, machine, article of manufacture or composition of matter. See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373, Fed. Cir. (1998), *cert. denied*, 119 S. Ct. 851 (1999). If so, it is statutory!

The first prong set forth in the Office Action, i.e., whether the invention is within the technological arts – redefining useful arts in a way not countenanced by the Federal Circuit, is not part of the legal standard for determining statutory subject matter under §101; and the possible need for a “technological arts” requirement was clearly not overlooked by the Federal Circuit. The Supreme Court told us in *Chakrabarty* that the statute – i.e., Section 101 – is constitutional and co-extensive with the “useful arts.” So, there is no basis for re-interpreting Section 101. The Office must apply Section 101 pursuant to the Federal Circuit’s interpretation. To add a further requirement for a “technological arts” litmus test flies in the face of the express directives of the Federal Circuit and the U.S. Supreme Court.

A rejection based on the absence of a “technological” art is not founded in the U.S. Constitution or any statute, and is an ultra vires exercise of administrative action inconsistent with the Administrative Procedures Act. If the Office wants to change the law, it should convince Congress, not reject meritorious claims meeting all statutory requirements.

However, even Congress, in addressing the aftermath of the *State Street* decision in the Business Methods Patent Improvements Act, failed to impose a “technological arts” requirement. So, the Office is trying to impose a requirement that neither Congress nor the Supreme Court nor the Federal Circuit requires – and that all have expressly or by clear implication rejected!

Although the Office Action tries to give the appearance of providing a rationale for its first “technological art” prong and argues that the Federal Circuit sidestepped and never addressed the point or overruled its prior statements in cases such as *Toma*, the Office is wrong!. There is no authoritative foundation for its assertion and it is irreconcilable with the foregoing and other passages of *State Street* and Supreme Court precedent.

Applicant appreciates that the Office finds it difficult to examine so-called non-technological business methods claims. But the Federal Circuit made it as clear as one can conceive a court making a point: it is time to stop throwing unfounded Section 101 rejections at applicants and time to assess inventions on the basis of their novelty and unobviousness! If Congress wishes to change Section 101, it can do so, but the Office has to accept the statute it is charged with administering.

That there are those in the Office who seek to generate new test cases in an effort to get the Federal Circuit or, ultimately, the U.S. Supreme Court to change the law and impose a “technological arts” test is well known. But it is unfair to subject applicant after applicant to the cost of responding to rejections that have no basis in the law.

This invention should now be examined on the merits under Sections 102 and 103, with the Section 101 rejection withdrawn.

### **Claim Rejections – 35 USC § 103**

Claims 1, 2 and 8 have been rejected as obvious over Buist in view of Bates.

In making this rejection, the Examiner correctly notes that Buist does not disclose paying a royalty on the transaction to the entity that issued the security that is the subject of the transaction. However, he then proceeds, quite erroneously, to state that Bates does disclose making such a payment to the issuer of the security (i.e., the “entity”). This is, quite simply, a hugely erroneous statement. Consequently, Applicant requests reconsideration and withdrawal of the rejection.

Bates is an article about a California law requiring art collectors to pay artists a royalty when they sell a work of art for a profit. The Examiner equates a work of art with the claimed “security,” which is a (usually regulated) financial instrument giving a holder

a certain ownership or debtor-creditor relationship with the issuing entity (which the Examiner equates to the artist in the California law).

Buist is a system and method for trading securities over the Internet.

Marrying the teachings of the two references to arrive at the claimed invention could only be the result of the impermissible use of hindsight, as nowhere is a motivation found in the references and one skilled in the area of securities trading would not have been motivated to look toward the art world for ideas to modify Buist or any other on-line securities trading system.

Moreover, had one been motivated to combine those two systems, the result likely would have been different than the claimed invention. The California law provides for a royalty to the artist only when the art collector has made something more than some threshold profit. Such an arrangement is completely unworkable on a securities exchange. At the time of a transaction, about the only things known are the identities of the transacting parties and the price at which the exchange occurs. What the seller paid originally is not known to the exchange and the prior purchase might not even have occurred on the same exchange. Consequently, Applicant has invented and claimed a system and method wherein a royalty is paid on a transaction, whether it involves a profit or a loss. This may well alter the dynamics of trading and of the issuer's revenue stream since the frequency of trading may have more influence on royalties than the profit involved in the transaction. Moreover, it may be the buyer that pays the royalty, or both the buyer and seller, unlike in the California art collector situation.

Thus, not only is there no motivation to even support a *prima facie* case for obviousness, but also the combination suggested by hindsight would not be the claimed invention.

The obviousness rejection therefore should be withdrawn.

### **New Claims**

Claims 93-112 are newly added. Within this group, only claims 93 and 106 are independent:

93. (New) A method of transferring a security in an entity, the method comprising the steps of:

operating a computer system to consummate by a first party and a second party a transaction in the security, the first party and the second party being distinct from the entity; and

operating a computer system to determine and pay a royalty on the transaction to the entity.

106. (New) A computer system for use in a process of exchanging securities, comprising:

means for consummating a transaction between a first party and a second party, in securities issued by an issuing entity distinct from the issuing entity; and

means for determining a royalty to be paid to the issuing entity because of the transaction.

As should be immediately apparent, claims 93 and 106 are counterpart method and apparatus claims. Claim 93 is drawn to a computer-implemented method and claim 106 is drawn to a computer system.\* As such, even if the Office's interpretation of statutory subject matter were correct, both of these claims, and their dependent claims, manifestly satisfy the "technological arts" requirement. Moreover, from the foregoing discussion it will also be clear that the prior art of record neither teaches nor makes obvious the subject matter of these claims.

### **Misinterpretation of E\*Trade Article**

The Office Action makes passing reference to the E\*Trade article but does not apply it against any claims. The Office Action indicates the Examiner notes that E\*Trade expected to collect a small royalty fee on international transactions. Applicant wishes the record to be clear. Those royalties have nothing to do with the royalties in Applicant's claims. They are not royalties paid to the entity that issues a traded security. They are royalties for use of the E\*Trade system – i.e., a franchise or license fee paid to E\*Trade.

---

\* Claim 106 is somewhat similar, but not identical, to withdrawn claim 18. Owing to both the differences with respect to claim 18 and the fact that the election requirement has not been made final, it is proper to add claim 106 and all other new claims, and to point out they correspond to Fig. 1, at least.



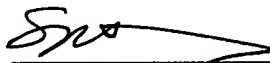
## CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,  
*Jacob WOHLSTADTER, Applicant*

By:



Steven J. Henry, Reg. No. 27,900  
Wolf, Greenfield & Sacks, P.C.  
600 Atlantic Avenue  
Boston, Massachusetts 02210-2206  
Telephone: (617) 646-8000

Docket No.: W0538.70003US00

Date: April ~~27~~<sup>29</sup>, 2005

x04/29/05x